MATERIAL SAFETY DATA SHEET

BUTYL TUADS DLC®-A

Date Revised: January 7, 2009

1 - PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: Butyl Tuads DLC-A
CHEMICAL NAME: Tetrabutylthiuram disulfide on silicon dioxide

HMIS RATING	
Health	1
Flammability	1
Reactivity	0

Company: NATROCHEM, INC.
P.O. Box 1205
Savannah, GA 31402-1205

Telephone Numbers:
Transportation Emergencies:
CHEMTREC (U.S.A.): (800) 424-9300 (24 hours)
CHEMTREC (International): (202) 483-7616 (24 hours, call collect)
Product Information: (912) 236-4464 (EST, 8:00AM – 4:00PM M-F)

2 – Composition

The component(s) listed below is identified as a hazardous chemical under the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

INGREDIENT	CAS #	% by weight
Silicon Dioxide	7631-86-9	28
Tetrabutyl thioperoxydicarbonicdiamide	1634-02-2	72

3 - PHYSICAL DATA

Boiling Point: N/DA
Vapor Pressure (mm Hg): N/DA
Vapor Density (Air = 1): N/DA
Solubility in Water: Negligible
Specific Gravity: 1.22 (calculated)
Percent Volatiles: N/DA
Evaporation Rate: N/DA
Appearance and Odor: Brown, free flowing powder with sweetish odor.

4 - FIRE & EXPLOSION DATA

FLASH POINT (Method Used): 138ºC (280ºF) (COC)
FLAMMABLE LIMITS: N/DA
AUTOIGNITION TEMPERATURE: N/DA

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, and foam.

SPECIAL FIRE FIGHTING PROCEDURES: Positive pressure self-contained breathing apparatus.

UNUSUAL FIRE & EXPLOSION HAZARDS: None known.

5 - HEALTH HAZARD DATA

CHRONIC HEALTH EFFECTS: An epidemiological study was conducted which included 165 precipitated silica workers who had been exposed for an average of 18 years. No adverse effects were noted in complete medical examination (including chest roentgenograms) of these workers. Pulmonary function decrements were correlated only with smoking and age but not with the degree or duration of dust exposure. Laboratory studies have also been conducted in small animals via inhalation to levels of precipitated silica dust of up to 126 mg/m3 for periods from six months to two years. Although precipitated silica was temporarily deposited in the animals lungs, most of the deposited material was cleared soon after the dust exposure ended. The results of all studies performed by, or known to, PPG indicate a very low order of pulmonary activity for synthetic precipitated silica.

PRIMARY ROUTE OF ENTRY- Inhalation & skin.

CHEMICAL LISTED AS CARCINOGEN OR POTENTIAL CARCINOGEN: None.
NTP: No IARC: No OSHA: No

EFFECTS OF EXPOSURE-
EYES- Mildly irritating. Excessive contact with powder can cause drying of mucous membranes of eyes due to absorption of moisture and oils.

SKIN- Mildly irritating. Will discolor skin by reaction with iron and copper metals in the skin.

INHALATION- Nuisance dust. Excessive contact with powder can cause drying of mucous membranes of nose and throat due to absorption of moisture and oils. This material can also cause nasal irritation and nosebleeds.

INGESTION- Not significantly toxic. Do not ingest alcoholic beverages immediately before and after handling this material (antabuse reaction).

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE- Persons with breathing problems or lung disease should not work in dusty areas unless a physician approves and certifies their fitness to wear respiratory protection.

6 - EMERGENCY & FIRST AID PROCEDURES

EYE CONTACT: Immediately rinse with clean water for 15 minutes. Retract eyelids often. If irritation persists, seek medical attention.

SKIN CONTACT: Immediately remove contaminated clothing. Wash skin thoroughly with mild soap and water. Flush with lukewarm water for 15 minutes. Seek medical attention if ill effect or irritation develops.

INHALATION: If overcome by exposure, remove victim to fresh air. Keep warm and quiet. Give artificial respiration.

INGESTION: Call physician if subject has used alcohol within 48 hours.

7 - REACTIVITY DATA

STABILITY: Stable.

MATERIALS TO AVOID- Avoid alteration of product properties before reuse. Calcining, which may result in crystalline formation or mixing with additives may alter toxicological properties. Strong acids and reducing agents.

CONDITIONS TO AVOID- Avoid high temperatures (>800º C) treatment.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon, nitrogen, and sulfur when burned.

HAZARDOUS POLYMERIZATION: Will not occur.

8 - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: MINIMIZE SPILL AREA. Vacuum spill material and place in closed plastic bags for disposal.

WASTE DISPOSAL METHOD: Not a RCRA hazardous waste. Dispose of according to applicable environmental regulations.

9 - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Use a respirator such as 3M 9900 or equivalent for protection against pneumoconiosis producing dusts.

VENTILATION: Provide explosion proof ventilation as required to control airborne dust levels. The sum total of all ingredients may emit vapors during normal processing. All possible health effects are not known and individual sensitivities will vary. Effective exhaust ventilation should always be provided to draw dust, fumes and vapors away from workers to prevent routine inhalation. Ventilation should be adequate to maintain ambient workplace atmosphere below the limits listed in Section V.

PROTECTIVE GLOVES: Impervious gloves to protect against contact with product.

EYE PROTECTION: Safety goggles.

OTHER PROTECTIVE EQUIPMENT: Protective clothing, eye wash station, safety shower.

10 - SPECIAL PRECAUTIONS

HANDLING AND STORAGE: Handling can create explosive dust clouds. Eliminate ignition sources, use explosive proof equipment. Conveying and processing equipment should be spark-proof, well bonded and grounded. Avoid dust accumulations.

OTHER PRECAUTIONS: Wash with soap and water before eating, drinking, smoking, or using toilet facilities. Launder contaminated clothing before reuse.

11 - REGULATORY INFORMATION

TOXIC SUBSTANCE CONTROL ACT (TSCA):
The components of this product are contained on the Inventory of the Toxic Substance Control Act: Butyl Tuads

SARA TITLE III INFORMATION:

SECTION 313 - TOXIC CHEMICALS:
This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372):

CAS REGISTRY #	CHEMICAL NAME	PERCENT BY WEIGHT

This product does not contain a toxic chemical in excess of 1% of the mixture.

This information must be included in all MSDS's that are copied and distributed for this material.

SECTION 302 - EXTREMELY HAZARDOUS SUBSTANCES:
This product does not contain an extremely hazardous substance.

SECTION 311/312 - HAZARD CATEGORIES:
The physical and health hazard categories for this product are:

Fire Hazard: None
Sudden Release of Pressure Hazard: None
Reactivity Hazard: None
Immediate (Acute) Health Hazard: Silicon Dioxide
Delayed (Chronic) Health Hazard: None

TRANSPORTATION INFORMATION:
DOT Shipping Name: Not DOT regulated
DOT Identification Number:

12 - OTHER INFORMATION

Revision Note: Review and addition of CAS number.
Revision Date: January 7, 2009

Prepared by: Craig Moore

N/A = Not applicable N/D = Not determined N/DA = No Data Available N/E = Not established